

I. AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) Compositions of fluids for preparing polymeric foams, preferably polyurethane foams, comprising:

- HFC 365mfc from 5 to 8 parts by weight/100 parts of polymeric foam;
- one or more fluorinated compounds, liquid at room temperature and having boiling point from 50°C to 150°C, preferably from 60°C to 130°C, and having formula



wherein:

R' is ~~$(O)_{n0}-C_nF_{2n}H$, $(O)_{n0}-C_nH_{2n+1}$, $(O)_{n0}-C_nF_{2n}H$ or $(O)_{n0}-C_nH_{2n+1}$~~ , n being an integer from 1 to 4, preferably 1 or 2; n_0 is equal to 0, 1, 0 or 1;

R is: ~~$-C_nF_{2n}H$, $-C_nF_{2n+1}$, $-C_nF_{2n}H$ or $-C_nF_{2n+1}$~~ ; wherein in the end groups R , R' one fluorine atom is optionally substituted with one chlorine atom; n is as above; m is an integer from 1 to 3;

R_f is:

- linear or branched ~~when possible~~ perfluoroalkylene, from 2 to 12 carbon atoms, preferably from 3 to 12 carbon atoms, containing at least one ether oxygen atom, when R_f has this meaning n_0 in R' is preferably equal to zero; or
- perfluoropolyoxyalkylene comprising units statistically distributed in the chain, the chain being formed of at least two carbon atoms, said units selected from ~~at least one of the following~~:
 - $(CFXO)$ wherein $X = F$ or CF_3 ;
 - $(CF_2(CF_2)_dO)$ wherein d is an integer comprised between 1 and 3; or
 - (C_3F_6O) ;

when R_f is perfluoropolyoxyalkylene n_0 in R' is preferably equal to 1; and

one fluorine atom is optionally substituted with one chlorine atom in the end group R or R'.

Claim 2. (Currently Amended) Compositions according to claim 1, wherein the ratio by weight of the compounds of formula (I) to the HFC 365mfc ~~weight~~ ranges from 0.005 to 0.1, ~~preferably from 0.01 to 0.08~~ 0.005:1 to 0.1:1.

Claim 3. (Previously Presented) Compositions according to claim 1, wherein for polyurethane foams, the amount of the compounds of formula (I) ranges from 0.2 to 1.5 parts by weight referred to 100 parts by weight of polyol and HFC 365mfc amount ranges from 20 to 25 parts by weight/100 parts by weight of polyol.

Claim 4. (Currently Amended) Compositions according to claim 1, wherein the compounds of formula (I) have a molecular weight from 230 to 500, ~~preferably from 250 to 450.~~

Claim 5. (Currently Amended) Compositions according to claim 1, wherein the (C₃F₆O) unit in R_f of formula (I) is ~~selected between~~ (CF₂CF(CF₃)O) or (CF(CF₃)CF₂O).

Claim 6. (Currently Amended) Compositions according to claim 1, wherein in formula (I) R is a group selected from the ~~following~~ -CF₂H, -CF₂CF₂H, or -CFHCF₃.

Claim 7. (Currently Amended) Compositions according to claim 1, wherein in formula (I) n₀ of R' equal to 1, R_f is a (per)fluoropolyether chain selected from ~~the following structures:~~

- 1) -(CF₂O)_a-(CF₂CF₂O)_b-
a and b being integers; when a is different from zero, then b/a is comprised between 0.3 and 10, extremes included; when a is equal to zero b is an integer as defined below;
with R in formula (I) = -C_nF_{2n}H;
- 2) -(CF₂-(CF₂)_z-CF₂O)_b-
wherein z' is an integer equal to 1 or 2; b' is as defined below; or
- 3) -(C₃F₆O)_r-(C₂F₄O)_b-(CFL₀O)_t-

$L_0 = -F, -CF_3$;

r, b and t being integers; when b and t are different from zero $r/b = 0.5-2.0$, $(r+b)/t = 10-30$ and all the units having r, b , and t indexes are present;

or $b = t = 0$ and r satisfies the proviso indicated below;

or $b = 0$ and r and t are different from zero;

a, b, b', r, t , are integers whose sum is such that the compound of formula (I) containing the bivalent R_f radical has boiling point in the above range.

Claim 8. (Currently Amended) Compositions according to claim 1, wherein the fluids of formula (I) are selected from the following:

- $HCF_2O(CF_2CF_2O)_{1,8}(CF_2O)_{1,4}CF_2H$
- $HCF_2O(CF_2CF_2O)_2(CF_2O)_{0,7}CF_2H$
- $HCF_2O(CF_2CF_2O)_3(CF_2O)_{0,4}CF_2H$
- $CF_3O(CF_2CF_2O)_2CF_2H$
- $CF_3O(CF_2CF_2O)_2(CF_2O)CF_2H$
- $CF_3O(CF_2CF(CF_3)O)_2CF_2H$
- $HCF_2CF_2O(CF_2CF_2O)CF_2CF_2H$
- $HCF_2CF_2OCF_2C(CF_3)_2CF_2OCF_2CF_2H$
- $CF_3(CF_2)_5OCF_2CF_2H$
- $CF_3(CF_2)_6OCF_2H$
- $HCF_2O(CF_2O)(CF_2CF_2O)CF_2H$
- $HCF_2O(CF_2O)(CF_2CF_2O)_2CF_2H$
- $HCF_2O(CF_2CF_2O)_2CF_2H$
- $HCF_2O(CF_2O)_2(CF_2CF_2O)CF_2H$
- $CF_3(CF_2)_3OCH_3$
- $CF_3(CF_2)_3OC_2H_5$ or
- $CF_3(CF_2)_6OC_2H_5$.

Claim 9. (Currently Amended) Compositions according to claim 8, wherein the fluids of formula (I) are selected from the following:

$HCF_2O(CF_2O)(CF_2CF_2O)CF_2H$, $HCF_2O(CF_2O)(CF_2CF_2O)_2CF_2H$,

$\text{HCF}_2\text{O}(\text{CF}_2\text{CF}_2\text{O})_2\text{CF}_2\text{H}$, $\text{HCF}_2\text{O}(\text{CF}_2\text{O})_2(\text{CF}_2\text{CF}_2\text{O})\text{CF}_2\text{H}$, or
 $\text{CF}_3(\text{CF}_2)_3\text{OCH}_3$, $\text{CF}_3(\text{CF}_2)_3\text{OC}_2\text{H}_5$, $\text{CF}_3(\text{CF}_2)_6\text{OC}_2\text{H}_5$.

Claim 10. (Currently Amended) Compositions according to claim 1, wherein the HFC 365mfc amount is substituted, up to 50% by weight of HFC 365mfc, by co-foaming agents selected from ~~the following~~:

- hydrofluorocarbons selected from the group consisting of HFC 134a 1,1,1,2 tetrafluoroethane $\text{CH}_2\text{F}-\text{CF}_3$, and HFC 227ea 1,1,1,2,3,3,3 heptafluoropropane $\text{CF}_3-\text{CHF}-\text{CF}_3$; or
- hydrocarbons having 5-6 carbon atoms, selected from the group consisting of ~~following~~: n-pentane, cyclopentane, isopentane, and n-hexane.

Claim 11. (Currently Amended) Polymeric foams, ~~preferably polyurethane foams~~, containing in percent by weight on the total, from 5 to 10% of the compositions of claim 1.

Claim 12. (Currently Amended) Foams according to claim 11, wherein the foams are either selected between the polyurethane or thermoplastic foams.

Claim 13. (Currently Amended) ~~Use of the compositions according to claims 1 to prepare polymeric foams, preferably polyurethane foams~~ A method for preparing polymeric foams having thermoinsulating properties, where the compositions of fluids of claim 1 are used.

Claim 14. (New) Compositions according to claim 1, wherein the polymeric foams are polyurethane foams.

Claim 15. (New) Compositions according to claim 1, wherein the compounds of formula (I) have a boiling point from from 60°C to 130°C.

Claim 16. (New) Compositions according to claim 1, wherein in formula (I) n is 1 or 2.

Claim 17. (New) Compositions according to claim 1, wherein the linear or branched perfluoroalkylene of R_f in formula (I) has 3 to 12 carbon atoms.

Claim 18. (New) Compositions according to claim 2, wherein the ratio by weight of the compounds of formula (I) to the HFC 365mfc ranges from 0.01:1 to 0.08:1.

Claim 19. (New) Compositions according to claim 4, wherein the compounds of formula (I) have a molecular weight of from 250 to 450.

Claim 20. (New) The method of claim 13, wherein the polymeric foams are polyurethane foams.